

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
<p>All Times are in US Central Time Zone (Austin, TX, USA). Please check your local time carefully!</p> <p>Please Note that Daylight savings time ends on November 1, 2 AM in USA, while it ended on October 25, in Europe.</p> <p>There is no daylight Saving time in Asia! Korea and Japan will be ahead by 14 Hours on October 31 and 15 hours on November 1!</p> <p><i>Version, October 26, 2020</i></p> <p>7:30 AM, Saturday, October 31, 2020, Austin, TX, USA (1:30 PM, Netherlands / 9:30 PM Korea and Japan)</p> <p>EUVL Short Course</p> <p><i>Short Courses and Source Workshop require separate registrations. Please visit www.euvlitho.com for information.</i></p>								
AV Test and Speaker Check-in						0:30	7:30 AM	8:00 AM
			Vivek Bakshi	EUV Litho Inc.	Lecture	1:00	8:00 AM	9:00 AM
			Jinho Ahn	Hanyang University	Lecture	1:30	9:00 AM	10:30 AM
Break						0:15	10:30 AM	10:45 AM
			Sascha Migura	Carl Zeiss	Lecture	1:30	10:45 AM	12:15 PM
Break						0:15	12:15 PM	12:30 PM
			Patrick Naulleau	CXRO	Lecture	1:30	12:30 PM	2:00 PM
			Vivek Bakshi	EUV Litho Inc.	Lecture, Summary and Q&A	0:30	2:00 PM	2:30 PM
<i>EUVL Short Course Adjourned</i>								

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
7:30 AM, Sunday, November 1, 2020, Austin, TX, USA (2:30 PM, Netherlands / 10:30 PM Korea and Japan)								
EUV and Soft X-ray Source Short Course								
<i>Short Courses and Source Workshop require separate registrations. Please visit www.euvlitho.com for information.</i>								
AV Test and Speaker Check-in						0:30	7:30 AM	8:00 AM
			Vivek Bakshi	EUV Litho Inc.	Introductions	0:10	8:00 AM	8:10 AM
			Gerry O'Sullivan	UCD	Lecture	2:00	8:10 AM	10:10 AM
Break						0:15	10:10 AM	10:25 AM
			David Attwood	UC Berkeley	Lecture	2:00	10:25 AM	12:25 PM
Break						0:15	12:25 PM	12:40 PM
			Vivek Bakshi	EUV Litho Inc.	Lecture	1:30	12:25 PM	1:55 PM
Source Short Course Adjourned								

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
-----------	---------	------	-----------	---------	-------	----------	-------	--------

7:30 AM, Monday, November 2, 2020, Austin, TX, USA (2:30 PM, Netherlands / 10:30 PM Korea and Japan)

Session 1: PSI EUVL Program Showcase

Please see Abstract Book on website for abstracts and co-author (s) information by paper #.

					<i>AV Test and Speaker Check-in</i>	0:30	7:30 AM	8:00 AM
					Session Co-Chairs: Yasin Ekinci (PSI) and Vivek Bakshi (EUV Litho, Inc.)			
1	PSI Showcase	Vivek Bakshi	EUV Litho, Inc.	Introduction and Announcements	0:05	8:00 AM	8:05 AM	
				An Overview of PSI and its Electron Accelerator-based Light Sources and the Semiconductor industry	0:15	8:05 AM	8:20 AM	
1 S61	PSI Showcase	Gabriel Aeppli	PSI	Imaging of Integrated Circuits using 3D X-ray Ptychography	0:20	8:20 AM	8:40 AM	
1 S62	PSI Showcase	Mirko Holler	PSI	EUV Mask Inspection with the RESCAN APMI Tool: Effects of the Illumination NA	0:15	8:40 AM	8:55 AM	
1 S63	PSI Showcase	Ricarda Nebling	PSI	Toward High Resolution and Efficient Reconstruction for EUV Actinic Mask Review	0:15	8:55 AM	9:10 AM	
1 S64	PSI Showcase	Hyun-Su Kim	PSI	Allenet Image Blur Measurement using EUV Interference Lithography for the Characterization of Resist and Exposure Tool Performances	0:15	9:10 AM	9:25 AM	
1 S65	PSI Showcase	Timothee Allenet	PSI	Chemical Amplified Backbone Breaking Polymers: Designing New Resists for EUV Lithography	0:15	9:25 AM	9:40 AM	
1 S66	PSI Showcase	Theodoros Manouras	PSI	Break	0:20	9:40 AM	10:00 AM	
				Preliminary Design Considerations for an Electron Storage Ring with Application to EUV Mask Inspection	0:20	10:00 AM	10:20 AM	
1 S67	PSI Showcase	Terence Garvey	PSI	Soft X-Ray ARPES at Swiss Light Source: Electronic Structure of Device Materials	0:20	10:20 AM	10:40 AM	
1 S68	PSI Showcase	Vladimir Stokov	PSI	Soft x-ray Photoelectron Spectroscopy for Device Physics at the PEARL Beamline	0:20	10:40 AM	11:00 AM	
1 S69	PSI Showcase	Matthias Muntwieler	PSI					

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
1	S70	PSI Showcase	Florian Döring	Xrnanotech	A PSI Spin-Off for EUV and X-ray Optics	0:20	11:00 AM	11:20 AM
					AAT The Venture of Accelerating PSI's	0:20	11:20 AM	11:40 AM
1	S71	PSI Showcase	Jens Rehanek	AAT	Accelerator Technologies for the Industry			
					Displacement Talbot Lithography: A New Technology for Printing Periodic Nanostructures over Large Areas	0:20	11:40 AM	12:00 PM
1	S72	PSI Showcase	Harun Solak	Eulitha				

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
-----------	---------	------	-----------	---------	-------	----------	-------	--------

7:30 AM, Tuesday, November 3, 2020, Austin, TX, USA (2:30 PM, Netherlands / 10:30 PM Korea and Japan)

Session 2: Code Comparison

Please see Abstract Book on website for abstracts and co-author (s) information by paper #.

AV Test and Speaker Check-in						0:30	7:30 AM	8:00 AM
2			Vivek Bakshi	EUV Litho, Inc	Welcome and Announcements	0:05	8:00 AM	8:05 AM
Session Co-Chairs: John Sheil (ARCNL) and Howard Scott (LLNL)								
						0:20	8:05 AM	8:25 AM
2	S91	Code Comparison	John Sheil	ARCNL	Code Comparison _ Problem Description			
				Osaka	Radiation Hydrodynamic Simulation Code	0:15	8:25 AM	8:40 AM
2	S92	Code Comparison	K. Nishihara	University	STAR2D (Invited)			
					JATOM Code for Calculation of Atomic	0:20	8:40 AM	9:00 AM
2	S93	Code Comparison	Akira Sasaki	QST	Processes in Sn Plasmas			
						0:20	9:00 AM	9:20 AM
2	S94	Code Comparison	Howard Scott	LLNL	LLNL Code Comparison Submissions (Invited)			
					Break	0:20	9:20 AM	9:40 AM
					Modeling Laser Energy Deposition with the	0:20	9:40 AM	10:00 AM
2	S95	Code Comparison	Mikhail Basko	KIAM	RALEF Code (Invited)			
					THERMOS Toolkit: Software Package for	0:20	10:00 AM	10:20 AM
					Radiative Properties Calculations of LTE and			
2	S96	Code Comparison	Ilya Vichev	KIAM	Non-LTE Plasmas (Invited)			
					Radiation Physics Models for High Energy	0:20	10:20 AM	10:40 AM
				Prizm	Density Plasmas, Typical Applications for EUV			
2	S97	Code Comparison	Igor Golovkin	Computations	Lithography (Invited)			
					Atomic Kinetics Modelling of Sn Plasmas using	0:20	10:40 AM	11:00 AM
2	S98	Code Comparison	John Sheil	ARCNL	ATOMIC (Invited)			
					Non-LTE Atomic Physics in Laser Plasma	0:20	11:00 AM	11:20 AM
2	S99	Code Comparison	Hilik Frank	LLNL	Simulations			
						0:20	11:20 AM	11:40 AM
2	S100A	Code Comparison	John Sheil	ARCNL	Code Comparison _ Comparison - Problem 1			

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
						0:20	11:40 AM	12:00 PM
2	S100B	Code Comparison	Howard Scott	LLNL	Code Comparison _ Comparison - Problem 2			
						0:20	12:00 PM	12:20 PM
2	NA	Code Comparison	ALL		Discussion			

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
-----------	---------	------	-----------	---------	-------	----------	-------	--------

7:30 AM, Wednesday, November 4, 2020, Austin, TX, USA (2:30 PM, Netherlands / 10:30 PM Korea and Japan)

Sessions 3-5 : Keynote, Lasers, Metrology and Applications

Please see Abstract Book on website for abstracts and co-author (s) information by paper #.

AV Test and Speaker Check-in						0:30	7:30 AM	8:00 AM
			Vivek Bakshi	EUV Litho, Inc.	Introduction and Announcements	0:05	8:00 AM	8:05 AM
Session Co-Chairs: Reza Abhari (ETHZ)								
3 S1	Keynote	Hakaru Mizoguchi	Gigaphoton	Update of >300W High Power LPP-EUV Source	Challenge for Semiconductor HVM	0:40	8:05 AM	8:45 AM
3 S2	Keynote	Larissa Juschkin	KLA Corporation	Source Performance Metrics for EUV Mask	Inspection	0:40	8:45 AM	9:25 AM
3 S3	Keynote	Steve Carson	Intel	Evolving Source Demands and Requirements for EUV Lithography in Manufacturing		0:40	9:25 AM	10:05 AM
Break						0:20	10:05 AM	10:25 AM
Session Co-Chairs: Peter Kraus (ARCNL) and Martin Smrz (HiLASE)								
4 S11	Lasers	Peter Kraus	ARCNL	Ultrafast Extreme-ultraviolet Emission from Solids (Invited)		0:20	10:25 AM	10:45 AM
4 S12	Lasers	Martin Smrz	HiLASE	Industrial kW-class Picosecond Thin-disk Lasers for EUV Light Sources (Invited)		0:20	10:45 AM	11:05 AM
4 S13	Lasers	Thomas Metzger	Trumpf	Ultrafast Thin-Disk Amplifiers (Invited)		0:20	11:05 AM	11:25 AM
Break						0:20	11:25 AM	11:45 AM
Session Co-Chairs: Fergal O'Reilly (UCD) and Yusuke Teramoto (Ushio)								
5 S14	Metrology and Applications	Fergal O Reily	UCD	A Laboratory Soft X-ray Microscope (Invited)		0:20	11:45 AM	12:05 PM
5 S15	Metrology and Applications	Sascha Brose	RWTH-Aachen	In-lab EUV Dual Beamline for Industrial and Scientific Applications		0:20	12:05 PM	12:25 PM
5 S21	Metrology and Applications	Marco Weber	ETHZ	Light Source Development for Mask and Wafer Inspection HVM tools		0:20	12:25 PM	12:45 PM

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
		Metrology and Applications	Yusuke Teramoto	Ushio	High-brightness LDP source for actinic patterned mask inspection (Invited)	0:20	12:45 PM	1:05 PM

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
7:30 AM, Thursday, November 5, 2020, Austin, TX, USA (2:30 PM, Netherlands / 10:30 PM Korea and Japan)								
Sessions 6-9: Speed Presentations, HVM Sources, EUVL Extension - Blue-X								
<i>Please see Abstract Book on website for abstracts and co-author (s) information by paper #.</i>								
AV Test and Speaker Check-in						0:30	7:30 AM	8:00 AM
			Vivek Bakshi	EUV Litho, Inc.	Introduction and Announcements	0:05	8:00 AM	8:05 AM
Session Co-Chairs: Vivek Bakshi (EUV Litho)								
6	S31	Speed Presentation	Hiromu Kawasaki	Utsunomiya University	Energy Spectra of Suprathermal Gadolinium Ions for Beyond Extreme-ultraviolet Source	0:05	8:05 AM	8:10 AM
6	S32	Speed Presentation	Misaki Shoji	Utsunomiya University	Development of Yb:YAG Thin-disk Regenerative Amplifier for Compact Plasma EUV Sources	0:05	8:10 AM	8:15 AM
6	S33	Speed Presentation	Takeshi Higashiguchi	Utsunomiya University	Stimulated Emission Depletion Phenomenon in Luminescence of Scintillator Excited by Soft x-ray toward High-resolution Water-window Microscope	0:05	8:15 AM	8:20 AM
6	S34	Speed Presentation	Lucas Poirier	ARCCNL	High-energy Features in the Ion energy Distribution from Laser-produced Tin Plasmas	0:05	8:20 AM	8:25 AM
6	S35	Speed Presentation	Subam Rai	ARCNL	Interactions of Sn ions at Energies and in Charge States Relevant to the Mitigation of Sn Ions coming from EUV Sources	0:05	8:25 AM	8:30 AM
Session Co-Chairs: Kentaro Tomita (Kyushu University) and Takeshi Higashiguchi (Utsunomiya University)								
7	S41	HVM EUV Sources -1	Yuichi NISHIMURA	Gigaphoton	Development Progress of the CO2 Laser and Shooting Control System for the High Power LPP-EUV light source	0:20	8:30 AM	8:50 AM
7	S42	HVM EUV Sources -1	Kentaro Tomita	Kyushu University	Recent Diagnostics Results of EUV Source and EUV Induced Plasmas (Invited)	0:20	8:50 AM	9:10 AM
7	S43	HVM EUV Sources -1	Takeshi Higashiguchi	Utsunomiya University	Feature of Highly-charged Suprathermal Ions from Laser-produced Plasma EUV sources (Invited)	0:20	9:10 AM	9:30 AM

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
		HVM EUV Sources				0:20	9:30 AM	9:50 AM
9	S48	-1	Bo Liu	ARCNL	The Morphology of Liquid Tin Sheet Targets.			
		Break			Break	0:10	9:50 AM	10:00 AM
Session Co-Chairs: Ladislav Pina (Rigaku) and James Colgan (LANL)								
					Present Status of cERL-FEL as a Proof of Concept on the EUV-FEL High-power Light Source for Future Lithography (Invited)	0:20	10:00 AM	10:20 AM
8	S51	EUVL Extension - Blue- X	Hiroshi Kawata	KEK				
		EUVL Extension - Blue- X		Tsinghua University	High-power EUV Light Source Based on Steady-state Microbunching Mechanism	0:20	10:20 AM	10:40 AM
8	S52	Blue- X	Xiujie Deng					
		EUVL Extension - Blue- X		Lund University	7nm and below: A Study for Undulators as an EUV Source	0:20	10:40 AM	11:00 AM
8	S53	Blue- X	Thomas Grandsaert					
		EUVL Extension - Blue- X		ARCNL	Characterization of Tin Plasma Driven by High-energy, 2- μ m-wavelength Light	0:20	11:00 AM	11:20 AM
8	S54	Blue- X	Lars Behnke					
		EUVL Extension - Blue- X		University of Twente	Angular and Spectral Bandwidth of XUV Multilayers Near Spacer Material Absorption Edges	0:20	11:20 AM	11:40 AM
8	S55	Blue- X	Andrey Zameshin					
		EUVL Extension - Blue- X		EUV Litho	EUVL Extension - Blue-X: An Update	0:20	11:40 AM	12:00 PM
8	S56	Blue- X	Vivek Bakshi					
					Break	0:20	12:00 PM	12:20 PM
Session Co-Chairs: Oscar Versolato (ARCNL) and Gerry O'Sullivan (UCD)								
		HVM EUV Sources			2020 Source Workshop Invited Presentation (Tentative title)	0:20	12:20 PM	12:40 PM
9	S44	-2	Michael Purvis	ASML				
					Physics aspects of Solid-state-laser-driven Plasma Sources of EUV light: ARCNL's Source Research program (Invited)	0:20	12:40 PM	1:00 PM
9	S45	HVM EUV Sources -2	Oscar Versolato	ARCNL				
		HVM EUV Sources -2		ARCNL	Interactions of Tin Ions in and around LPP-EUV Sources (Invited)	0:20	1:00 PM	1:20 PM
9	S46	-2	Ronnie Hoekstra	ARCNL				
		HVM EUV Sources -2		LANL	The Opacity of Sn at Conditions Relevant to CO ₂ Laser-produced Plasmas	0:20	1:20 PM	1:40 PM
9	S47	-2	James Colgan					

Session #	Paper #	Area	Presenter	Company	Title	Duration	Start	Finish
		HVM EUV Sources		Research Instruments	The EUV-Lamp: Compact EUV source for Actinic EUV Metrology in Laboratory and Industry (Invited)	0:20	1:40 PM	2:00 PM
9 S22	-2		Rainer Lebert					
		HVM EUV Sources		Ushio	Compact rotating-disc LPP source for metrology and laboratory applications	0:20	2:00 PM	2:20 PM
9 S24	-2		Yusuke Teramoto					
			Vivek Bakshi	EUV Litho, Inc.	Announcements	0:10	2:20 PM	2:30 PM
Workshop Adjourned								